NATIONAL COMMUNICABLE DISEASE CENTER

Morbidity and Mortality

Vol. 18, No. 52

For Week Ending December 27, 1969

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE / HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

DATE OF RELEASE: JANUARY 2, 1970 – ATLANTA, GEORGIA 30333

INTERNATIONAL NOTES

INFLUENZA

Widespread influenza activity has been occurring in Europe during the past month with large numbers of cases and widespread absenteeism reported.

In the United Kingdom, a sharp rise in influenza activity was noted during the week ending Dec. 12, 1969, affecting primarily London and southeastern England, with scattered outbreaks occurring elsewhere. *(1)* Provisional data from the General Register Office *(2)* show that the number of deaths attributed to influenza rose from an average of 4 per week in November to 52 for the week ending December 12. Pneumonia deaths increased to 1,136 from 750 and bronchitis deaths to 804 from 485. Of the 52 influenza deaths, 79 percent were in persons over age 55. A fourfold rise in cases diagnosed as influenza was noted between the last week of November and the first week in December. Activity has continued to increase in the London area with hospitals now accepting emergency cases only. Widespread industrial absenteeism has been reported, as well as staff shortages in hospitals and in ambulance, fire, transportation, post office, and communication services. Isolates were confirmed as similar to A2/Hong Kong/68. *(3)*

In France, many cases were also reported with epidemics in the Departments of Perigeux, Toulouse Lot,

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	52nd WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 52 WEEKS		
	December 27, 1969	December 28, 1968	1964 - 1968	1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis	25	80	29	3,484	4,374	2,940
Brucellosis	5	7	8	230	232	252
Diphtheria	4	20	10	213	260	214
Encephalitis, primary:						
Arthropod-borne & unspecified	15	23	23	1,319	1,455	1,880
Encephalitis, post-infectious	6	7	10	314	465	713
Hepatitis, serum	89	105	715	5,359	4,715	37,652
Hepatitis, infectious	638	685		48,085	45,578	
Malaria	35	55	50	3,216	2,370	559
Measles (rubeola)	310	257	1,232	24,600	22,617	203,010
Meningococcal infections, total	36	25	53	2,922	2,521	2,813
Civilian	34	25	- - -	2,664	2,306	- - -
Military	2	—	- - -	258	215	- - -
Mumps	1,392	1,649	- - -	88,375	148,804	- - -
Poliomyelitis, total	—	2	3	17	59	67
Paralytic	—	2	3	16	59	59
Rubella (German measles)	429	281	- - -	55,168	48,446	- - -
Streptococcal sore throat & scarlet fever	5,851	8,594	8,594	426,271	435,136	422,918
Tetanus	—	3	5	166	163	233
Tularemia	1	3	9	142	175	192
Typhoid fever	6	7	7	341	408	408
Typhus, tick-borne (Rky. Mt. spotted fever)	—	2	2	450	279	262
Rabies in animals	32	51	60	3,286	3,363	4,172

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	4	Rabies in man:	1
Botulism: Calif.-2	14	Rubella congenital syndrome: Ore.-1	16
Leptospirosis: * Calif.-1, Fla.-2	91	Trichinosis:	175
Plague:	5	Typhus, murine:	49
Psittacosis:	49		

*Delayed reports: Leptospirosis: Iowa 5.

EPIDEMIOLOGIC NOTES AND REPORTS

CLOSTRIDIUM PERFRINGENS FOOD POISONING – Memphis, Tennessee

On Oct. 22 nnd 23, 1969, an outbreak of gastroenteritis occurred among pupils and teachers of the Memphis, Tennessee, public school system who ate the noon meal in school cafeterias on October 22. Approximately 67,000 persons were served, of whom 1,844 in nine schools were interviewed. Of these, 628 gave a history of gastroenteritis for an overall nttack rate of 34 percent. Complete food and illness histories were obtained from 102 individuals. Of these, 76 persons reported illness characterized by diarrhea and abdominal cramps without fever. Incubation periods ranged from 3 to 18 hours (mean 10.1 hours – Table 1), and duration of illness was 4 to 48 hours (mean 17 hours). Food specific attack rates incriminated the main entrèe, braised beef on rice, as the contaminated vehicle (Table 2).

Toble 1
Incubotion Periods for Foodborne Illness
Memphis, Tennessee
October 22, 1969

Hours	Number of Cases
3	1
4	6
5	4
6	3
7	7
8	1
9	6
10	6
11	5
12	13
13	6
14	6
15	3
16	1
17	0
18	2
Unknown	7
Total	76

The beef was purchased from a local packinghouse which supplied choice beef from a large Oklahoma packer. Beef roasts were delivered to the schools on October 20 and 21. In each school kitchen, the roasts were cooked for 4 hours the day prior to serving. After being cooled at room temperature for 1½ hours, they were placed in a refrigerator for overnight storage. On the morning of serving, the beef was cut into cubes, combined with tomatoes, green peppers, onions, and flour and cooked for approximately 1 hour nt 450° F.

Dry U.S. Government commodity rice was delivered to the Memphis schools on October 15. After washing on October 22, the rice was cooked in water in a 450° F. oven for 1 hour.

Toble 2
Food-Specific Attock Rotes, Foodborne Illness
Memphis, Tennessee
October 22, 1969

Food Items Served	Number of Persons Who Ate Specified Food				Number of Persons Who Did NOT Eat Specified Food			
	Ill	Not Ill	Total	Percent Ill	Ill	Not Ill	Total	Percent Ill
Braised beef on rice	74	17	91	81*	2	9	11	18*
Green peas	48	20	68	71	28	6	34	82
Cabbage pepper salad	36	12	48	75	40	14	54	74
Buttered biscuits	46	12	58	79	30	14	44	68
Peach cobbler	62	22	84	73	14	4	18	78
Milk	60	16	76	79	16	10	26	62

* P < .00001

The braised beef and rice were taken from the ovens at approximately 10:45 a.m. and placed on the steam table for serving. Serving began at 11:00 a.m. Steam tables were were maintained at 140° F. throughout the serving time.

Cultures of leftover braised beef on rice were obtained on October 23. No pathogens were isolated. *Clostridium perfringens* was isolated from the stools of 25 of 28 patients and from raw meat at the Memphis packinghouse. *C. perfringens* isolates from the feces of 14 patients and four samples of the raw beef were serotyped. No common serotype was identified, but eight isolates from the 14 patients and two of the raw beef samples yielded organisms which did not react with available antisera.

The U.S. Department of Agriculture is conducting an investigation at the two packing plants.

(Reported by William H. Armes, Jr., Deputy Commissioner, Cecil B. Tucker, M.D., Director, Bureau of Preventive Health Services, W. M. Arnold, Director, Memphis Bronch Laboratory, and J. H. Barrick, Ph.D., Director, Division of Biological Laboratories, Tennessee Department of Public Health; George S. Lovejoy, M.D., F.A.A.P., Director, Donald R. Daffron, Administrative Assistant, Sanitation Division, and R. C. Rendtorff, Sc.D., M.D., Director, Division of Communicable Disease Control, Memphis and Shelby County Health Department; Anaerobic Bacteriology Laboratory, Bacteriol Reference Unit, Bacteriology Section, Microbiology Branch, Laboratory Division, NCDC; and an EIS Officer.)

Editorial Note:

The epidemiology and clinical charncteristics of this large outbreak are compatible with *C. perfringens* food poisoning. Of the 61 vehicles associated with *C. per-*

fringens outbreaks reported to NCDC in 1968 (MMWR, Vol. 18, No. 12), 24 involved beef products.

Involvement throughout the Memphis school system suggests that the contamination of the meat occurred before it was delivered to the schools. Inadequate cooking at the schools followed by cooling at room temperature the day prior to serving may have provided an atmosphere for incubation of the organism. Reheating for 1 hour the following day at 450° F. may not have been sufficient to kill the organisms.

The inability to demonstrate a common serotype may be a reflection of the small number of isolates from each patient submitted for serotyping. More likely, since isolates from eight of 14 patients and the beef did not react with the 91 types of *C. perfringens* antisera presently available, a "nontypable" strain may have been involved.

CURRENT TRENDS
ENCEPHALITIS – California

The encephalitis surveillance network set up in California in June 1969 (MMWR, Vol. 18, No. 28) continued through September. Hospital surveillance of acute central nervous system illness was carried out in 54 hospitals (7,800 beds) in 20 counties in the San Joaquin and Sacramento Valleys. During 17 weeks of surveillance, these hospitals reported 46 cases of encephalitis, 76 cases of aseptic meningitis, and 427 other acute neurologic illnesses. Five cases of encephalitis in the study area were confirmed by specific antibody titer rise as due to an arbovirus and were further characterized as St. Louis encephalitis (SLE) virus infection. The five patients were between 14 and 66 years of age, and all recovered completely. Three of the five patients with SLE virus infection were hospitalized in survey hospitals and were detected by that system; the other two were not treated in the hospitals included in the survey. Central nervous system illness due to echovirus types 4 and 9, Coxsackie virus B4, and mumps virus were also recognized in the study area.

For the state as a whole, 57 clinical cases of encephalitis in equines were reported, and serologic tests were done on specimens from 30 of these equines. Western equine encephalomyelitis (WEE) virus infection was confirmed by fourfold titer rise in two of these equines, and high stationary levels of antibody to WEE virus were found in five other unimmunized equines. None of 319 wildlife specimens tested for arboviruses were positive. SLE virus has been isolated from 23 of 1,579 pools of *Culex tarsalis* mosquitoes collected in the Sacramento Valley during the period July to September. Positive pools were collected about the same time and from the same places where human encephalitis was found.

(Reported by R. W. Emmons, M.D., and R. Marlor, M.D., Epidemiologists, Bureau of Communicable Disease Control, G. Humphrey, D.V.M., Chief, Veterinary Public Health Section, E. H. Lennette, M.D., Chief, Viral and Rickettsial Disease Laboratory, and R. Peters, Chief, Bureau of Vector Control, California Department of Public Health; and William B. Reeves, Ph.D., Dean, School of Public Health, University of California, Berkeley.)

INTERNATIONAL NOTES
QUARANTINE MEASURES
SMALLPOX VACCINATION REQUIREMENTS–Australia

In the past, air travelers over 12 months old who arrived in Australia without valid International Certificates of Vaccination against Smallpox were compelled by the Australian health authorities to be isolated for 14 days. Now, however, travelers over 12 months of age who arrive by air from Canada or the United States and have not been outside these two countries or countries situated on the direct trans-Pacific air routes between Australia and North America (Fiji Islands, New Caledonia, New Zealand) for at least 14 days prior to arrival in Australia and who do not possess a current International Certificate of Vaccination against Smallpox may be placed under quarantine surveillance for 14 days from the date of departure from Canada or the United States. Infants under the age of 12 months remain exempt from Australia's smallpox vaccination requirements.

Travelers whose circumstances preclude smallpox vaccination due to medical contraindication must present a letter issued by a licensed physician stating that the traveler is suffering from a condition which makes smallpox vaccination ill-advised. Recognized contraindications include (1) pregnancy; (2) eczema; (3) agammaglobulinemia or hypogammaglobulinemia; (4) a past history of exfoliative dermatitis, generalized vaccinia, or postvaccinial encephalitis; (5) a history of treatment with immunosuppressive agents such as corticosteroids, antilymphocytic serum, alkylating or cytotoxic drugs, or irradiation therapy other than superficial therapy; and (6) cachexia associated with malignant or other serious organic disease.

(Reported by the Foreign Quarantine Program, NCDC.)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 27, 1969 AND DECEMBER 28, 1968 (52nd WEEK)

AREA	ASEPTIC MENINGITIS	BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA	
				Primary including unsp. cases		Post-Infectious	Serum	Infectious			
	1969	1969	1969	1969	1968	1969	1969	1969	1968	1969	Cum. 1969
UNITED STATES...	25	5	4	15	23	6	89	638	685	35	3,216
NEW ENGLAND.....	1	–	–	–	2	–	7	81	33	1	103
Maine.....	–	–	–	–	–	–	–	2	6	–	8
New Hampshire.....	–	–	–	–	1	–	–	4	1	–	2
Vermont.....	–	–	–	–	–	–	–	1	–	–	–
Massachusetts.....	–	–	–	–	–	–	–	41	8	–	60
Rhode Island.....	1	–	–	–	–	–	2	18	8	–	11
Connecticut.....	–	–	–	–	1	–	5	15	10	1	22
MIDDLE ATLANTIC.....	2	–	–	3	2	–	39	73	114	6	394
New York City.....	–	–	–	–	1	–	24	–	55	1	28
New York, Up-State.	---	---	---	---	–	---	---	---	15	---	85
New Jersey..*.....	–	–	–	–	1	–	13	53	8	5	158
Pennsylvania.....	2	–	–	3	–	–	2	20	36	–	123
EAST NORTH CENTRAL...	3	–	1	5	10	1	4	138	98	4	330
Ohio.....	1	–	–	3	4	–	2	33	20	1	33
Indiana.....	–	–	–	1	–	–	–	15	7	1	28
Illinois.....	1	–	1	–	1	1	1	36	18	1	198
Michigan.....	1	–	–	1	4	–	1	50	46	1	70
Wisconsin.....	–	–	–	–	1	–	–	4	7	–	1
WEST NORTH CENTRAL...	1	–	–	1	1	–	–	18	42	3	232
Minnesota*.....	1	–	–	1	–	–	–	–	14	–	14
Iowa*.....	–	–	–	–	–	–	–	1	7	–	28
Missouri.....	–	–	–	–	1	–	–	13	13	–	45
North Dakota.....	–	–	–	–	–	–	–	–	–	–	4
South Dakota.....	–	–	–	–	–	–	–	1	–	–	2
Nebraska.....	–	–	–	–	–	–	–	1	–	1	6
Kansas.....	–	–	–	–	–	–	–	2	8	2	133
SOUTH ATLANTIC.....	2	4	–	2	3	–	6	55	77	11	811
Delaware.....	–	–	–	–	–	–	–	–	1	–	5
Maryland.....	–	–	–	–	–	–	1	5	14	8	42
Dist. of Columbia*.	–	–	–	–	1	–	–	–	4	–	2
Virginia.....	–	4	–	–	2	–	–	5	7	1	28
West Virginia.....	–	–	–	–	–	–	–	4	2	–	4
North Carolina.....	–	–	–	–	–	–	–	4	6	–	332
South Carolina.....	–	–	–	–	–	–	–	3	3	–	65
Georgia.....	–	–	–	–	–	–	–	9	6	2	280
Florida.....	2	–	–	2	–	–	5	25	34	–	53
EAST SOUTH CENTRAL...	2	–	1	–	–	–	1	34	20	–	198
Kentucky.....	–	–	–	–	–	–	–	13	11	–	169
Tennessee.....	–	–	–	–	–	–	1	8	1	–	–
Alabama.....	1	–	–	–	–	–	–	11	7	–	25
Mississippi.....	1	–	1	–	–	–	–	2	1	–	4
WEST SOUTH CENTRAL...	–	–	2	1	–	–	–	16	43	2	289
Arkansas.....	–	–	–	–	–	–	–	–	–	–	13
Louisiana*.....	–	–	2	1	–	–	–	–	6	–	46
Oklahoma*.....	–	–	–	–	–	–	–	6	8	2	81
Texas.....	–	–	–	–	–	–	–	10	29	–	149
MOUNTAIN.....	1	–	–	–	4	–	–	30	18	–	138
Montana.....	–	–	–	–	3	–	–	1	9	–	3
Idaho.....	–	–	–	–	–	–	–	1	–	–	5
Wyoming.....	–	–	–	–	–	–	–	2	–	–	–
Colorado.....	1	–	–	–	–	–	–	10	–	–	112
New Mexico.....	–	–	–	–	–	–	–	–	2	–	9
Arizona*.....	–	–	–	–	1	–	–	11	4	–	1
Utah.....	–	–	–	–	–	–	–	5	3	–	1
Nevada.....	–	–	–	–	–	–	–	–	–	–	7
PACIFIC.....	13	1	–	3	1	5	32	193	240	8	721
Washington.....	1	–	–	–	–	–	–	17	13	–	7
Oregon.....	–	–	–	1	–	–	4	11	10	1	19
California.....	12	1	–	2	1	5	28	159	202	7	560
Alaska.....	–	–	–	–	–	–	–	3	12	–	4
Hawaii.....	–	–	–	–	–	–	–	3	3	–	131
Puerto Rico*.....	---	---	---	---	–	---	---	---	17	---	4

*Delayed reports: Aseptic meningitis: Okla. 1
Brucellosis: Okla. 1
Encephalitis, primary: Minn. 1, Iowa 1
Encephalitis, post-infectious: Minn. 1
Hepatitis, serum: La. 1
Hepatitis, infectious: N.J. 1, D.C. 17, Ariz. 18, P.R. 17
Malaria: Iowa 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 27, 1969 AND DECEMBER 28, 1968 (52nd WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1969	1969	1968	1969	1969	1968	1969	1969	1969	Cum. 1969	1969
UNITED STATES...	310	24,600	22,617	36	2,922	2,521	1,392	–	–	16	429
NEW ENGLAND.....	2	1,213	1,379	2	114	139	109	–	–	2	47
Maine.....	–	10	38	–	8	6	10	–	–	1	–
New Hampshire.....	1	248	150	–	5	8	2	–	–	–	1
Vermont.....	–	3	4	–	–	1	2	–	–	–	–
Massachusetts.....	1	268	386	–	44	74	29	–	–	–	2
Rhode Island.....	–	27	94	1	15	9	22	–	–	–	2
Connecticut.....	–	657	707	1	42	41	44	–	–	1	42
MIDDLE ATLANTIC.....	30	8,050	4,743	1	479	443	126	–	–	2	31
New York City.....	11	5,039	2,433	–	89	90	57	–	–	–	3
New York, Up-State.	---	633	1,388	---	97	75	NN	---	---	1	---
New Jersey.*	13	1,126	721	–	186	156	69	–	–	–	12
Pennsylvania.....	6	1,252	201	1	107	122	NN	–	–	1	16
EAST NORTH CENTRAL...	161	3,288	4,261	5	396	318	503	–	–	1	118
Ohio.....	15	568	333	1	140	85	69	–	–	–	8
Indiana.....	16	501	746	1	53	45	18	–	–	–	14
Illinois.....	115	1,129	1,445	1	57	72	80	–	–	1	21
Michigan.....	4	402	353	2	118	91	87	–	–	–	29
Wisconsin.....	11	688	1,384	–	28	25	249	–	–	–	46
WEST NORTH CENTRAL...	–	1,238	488	3	142	143	26	–	–	1	13
Minnesota.....	–	11	19	–	29	32	–	–	–	–	–
Iowa.....	–	338	165	–	21	14	21	–	–	–	6
Missouri.....	–	32	81	1	57	50	2	–	–	–	6
North Dakota.....	–	81	142	–	2	4	3	–	–	–	1
South Dakota*	–	51	4	–	1	5	NN	–	–	–	–
Nebraska.*	–	716	67	1	14	9	–	–	–	–	–
Kansas.....	–	9	10	1	18	29	–	–	–	1	–
SOUTH ATLANTIC.....	49	3,019	1,862	7	510	505	151	–	–	1	32
Delaware.....	14	522	23	–	17	12	–	–	–	–	2
Maryland.....	–	100	104	2	43	44	15	–	–	–	–
Dist. of Columbia..	–	35	6	–	9	20	1	–	–	–	–
Virginia.....	12	1,011	460	–	60	50	28	–	–	–	14
West Virginia.....	–	226	337	1	25	14	41	–	–	–	7
North Carolina.....	19	373	322	3	99	99	NN	–	–	–	2
South Carolina.....	–	134	31	1	70	63	6	–	–	–	–
Georgia.....	–	2	4	–	78	98	–	–	–	–	–
Florida.....	4	616	575	–	109	105	60	–	–	1	7
EAST SOUTH CENTRAL...	1	132	508	–	211	222	51	–	–	1	14
Kentucky.....	–	75	107	–	85	98	12	–	–	–	4
Tennessee.....	–	21	65	–	77	70	35	–	–	–	7
Alabama.....	1	12	95	–	28	29	4	–	–	1	3
Mississippi.....	–	24	241	–	21	25	–	–	–	–	–
WEST SOUTH CENTRAL...	32	5,227	5,381	7	387	365	76	–	–	6	64
Arkansas.....	–	16	2	–	34	22	–	–	–	–	–
Louisiana.....	–	125	27	4	105	104	–	–	–	–	–
Oklahoma.....	–	143	132	–	36	57	38	–	–	–	14
Texas.....	32	4,943	5,220	3	212	182	38	–	–	6	50
MOUNTAIN.....	17	1,182	1,100	–	59	46	77	–	–	1	31
Montana*	–	122	58	–	8	7	15	–	–	1	4
Idaho.....	–	90	21	–	13	12	–	–	–	–	–
Wyoming.....	–	–	55	–	–	3	–	–	–	–	1
Colorado.....	–	142	526	–	13	14	29	–	–	–	11
New Mexico.....	–	290	176	–	8	1	4	–	–	–	–
Arizona.....	17	526	235	–	10	5	29	–	–	–	11
Utah.....	–	11	21	–	5	1	–	–	–	–	4
Nevada.....	–	1	8	–	2	3	–	–	–	–	–
PACIFIC.....	18	1,251	2,895	11	624	340	273	–	–	1	79
Washington.....	–	69	607	2	61	52	123	–	–	–	29
Oregon.....	–	201	594	3	25	26	17	–	–	–	7
California.....	18	915	1,648	6	517	244	111	–	–	1	37
Alaska.....	–	14	11	–	11	4	11	–	–	–	1
Hawaii.....	–	52	35	–	10	14	11	–	–	–	5
Puerto Rico*.....	---	2,131	524	---	19	21	---	---	---	–	---

*Delayed reports: Measles: N.J. delete 1, S. Dak. 48, Nebr. 40, P. R. 35
Mumps: P. R. 16
Poliomyelitis: Mont. delete 1 unspecified, add 1 paralytic
Rubella: P. R. 2

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

DECEMBER 27, 1969 AND DECEMBER 28, 1968 (52nd WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES...	5,851	–	166	1	142	6	341	–	450	32	3,286
NEW ENGLAND.....	960	–	1	–	16	–	16	–	1	–	57
Maine*.....	16	–	–	–	–	–	1	–	–	–	6
New Hampshire.....	44	–	–	–	–	–	–	–	–	–	5
Vermont.....	3	–	–	–	16	–	–	–	–	–	35
Massachusetts.....	148	–	1	–	–	–	8	–	1	–	3
Rhode Island.....	82	–	–	–	–	–	1	–	–	–	–
Connecticut.....	667	–	–	–	–	–	6	–	–	–	8
MIDDLE ATLANTIC.....	164	–	24	–	5	–	33	–	47	–	254
New York City.....	–	–	14	–	1	–	17	–	–	–	–
New York, Up-State.	---	---	3	---	4	---	6	---	7	---	240
New Jersey.*.....	NN	–	4	–	–	–	4	–	15	–	–
Pennsylvania.....	164	–	3	–	–	–	6	–	25	–	14
EAST NORTH CENTRAL...	824	–	19	–	18	1	37	–	3	–	233
Ohio.....	114	–	4	–	–	–	13	–	–	–	76
Indiana.....	91	–	–	–	6	–	–	–	–	–	56
Illinois.....	231	–	10	–	5	1	17	–	3	–	40
Michigan.....	240	–	5	–	–	–	6	–	–	–	10
Wisconsin.....	148	–	–	–	7	–	1	–	–	–	51
WEST NORTH CENTRAL...	261	–	14	–	14	–	10	–	8	4	624
Minnesota.....	4	–	6	–	–	–	4	–	–	1	166
Iowa.....	106	–	–	–	–	–	1	–	7	–	103
Missouri.....	5	–	4	–	10	–	3	–	–	2	149
North Dakota.....	110	–	–	–	–	–	–	–	–	–	77
South Dakota.....	25	–	–	–	–	–	–	–	1	–	43
Nebraska.....	7	–	–	–	1	–	1	–	–	–	14
Kansas.....	4	–	4	–	3	–	1	–	–	1	72
SOUTH ATLANTIC.....	973	–	31	–	23	2	52	–	253	14	785
Delaware.....	17	–	–	–	1	–	2	–	3	–	–
Maryland*.....	217	–	2	–	–	–	4	–	48	–	3
Dist. of Columbia..	1	–	2	–	–	–	3	–	–	–	–
Virginia.....	256	–	2	–	4	–	1	–	81	4	375
West Virginia.....	69	–	1	–	2	–	2	–	5	–	114
North Carolina.....	NN	–	3	–	6	2	13	–	67	–	5
South Carolina.....	74	–	1	–	2	–	1	–	32	–	–
Georgia.....	11	–	8	–	4	–	11	–	16	4	111
Florida.....	328	–	12	–	4	–	15	–	1	6	177
EAST SOUTH CENTRAL...	774	–	26	–	15	1	53	–	65	4	398
Kentucky.....	26	–	8	–	–	–	12	–	13	4	206
Tennessee.....	414	–	4	–	14	1	23	–	43	–	131
Alabama.....	177	–	8	–	–	–	4	–	6	–	55
Mississippi.....	157	–	6	–	1	–	14	–	3	–	6
WEST SOUTH CENTRAL...	390	–	30	–	26	2	38	–	51	6	475
Arkansas*.....	3	–	2	–	5	–	15	–	7	–	36
Louisiana.....	–	–	7	–	6	–	4	–	–	1	42
Oklahoma.....	93	–	1	–	9	–	–	–	32	3	75
Texas.....	294	–	20	–	6	2	19	–	12	2	322
MOUNTAIN.....	1,054	–	7	1	19	–	32	–	17	1	124
Montana.....	40	–	1	–	–	–	3	–	–	–	–
Idaho.....	215	–	–	–	–	–	4	–	6	–	–
Wyoming*.....	32	–	–	–	4	–	5	–	–	1	56
Colorado.....	365	–	2	–	–	–	3	–	9	–	3
New Mexico.....	145	–	–	–	1	–	10	–	–	–	22
Arizona.....	155	–	4	–	–	–	6	–	–	–	22
Utah.....	102	–	–	1	14	–	–	–	2	–	5
Nevada.....	–	–	–	–	–	–	1	–	–	–	16
PACIFIC.....	451	–	14	–	6	–	70	–	5	3	336
Washington.....	375	–	1	–	2	–	3	–	3	–	4
Oregon.....	–	–	1	–	2	–	6	–	–	–	4
California.....	---	–	12	–	2	–	51	–	2	3	328
Alaska.....	59	–	–	–	–	–	–	–	–	–	–
Hawaii.....	17	–	–	–	–	–	10	–	–	–	–
Puerto Rico.....	---	---	13	---	–	---	9	---	–	---	29

*Delaved reports: SST: Me. 35, Wyo. 184
Tetanus: N. J. 1, Md. 1
Rabies in animals: Ark. 2

Week No. 52

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED DECEMBER 27, 1969

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over		
NEW ENGLAND:	662	412	38	22
Boston, Mass.	208	121	9	8
Bridgeport, Conn.	38	21	1	–
Cambridge, Mass.	37	24	9	–
Fall River, Mass.	23	12	–	1
Hartford, Conn.	39	21	2	1
Lowell, Mass.	41	24	2	5
Lynn, Mass.	16	9	2	–
New Bedford, Mass.	26	20	1	–
New Haven, Conn.	53	36	–	1
Providence, R. I.	64	38	6	2
Somerville, Mass.	5	5	1	–
Springfield, Mass.	44	32	2	2
Waterbury, Conn.	28	20	–	–
Worcester, Mass.	40	29	3	2
MIDDLE ATLANTIC:	2,950	1,718	137	115
Albany, N. Y.†	41	24	1	2
Allentown, Pa.	39	24	5	1
Buffalo, N. Y.	150	86	6	4
Camden, N. J.	26	15	1	2
Elizabeth, N. J.	23	16	1	–
Erie, Pa.	37	24	4	4
Jersey City, N. J.	73	46	6	3
Newark, N. J.	56	24	4	7
New York City, N. Y.	1,633	952	73	61
Paterson, N. J.	36	22	1	2
Philadelphia, Pa.	297	156	2	12
Pittsburgh, Pa.	136	74	12	3
Reading, Pa.	50	33	1	2
Rochester, N. Y.	113	77	9	5
Schenectady, N. Y.	21	13	2	–
Scranton, Pa.	22	13	–	–
Syracuse, N. Y.	85	50	–	3
Trenton, N. J.	48	29	1	2
Utica, N. Y.	27	19	6	–
Yonkers, N. Y.	37	21	2	2
EAST NORTH CENTRAL:	2,393	1,392	78	106
Akron, Ohio	66	40	–	4
Canton, Ohio	36	21	2	4
Chicago, Ill.	708	376	22	39
Cincinnati, Ohio	147	81	3	5
Cleveland, Ohio	198	119	4	5
Columbus, Ohio	127	64	2	10
Dayton, Ohio	52	35	4	1
Detroit, Mich.	342	213	7	8
Evansville, Ind.	34	23	1	–
Flint, Mich.	54	30	3	7
Fort Wayne, Ind.	54	24	6	1
Gary, Ind.	23	12	1	4
Grand Rapids, Mich.	53	32	4	2
Indianapolis, Ind.	132	79	3	6
Madison, Wis.	30	21	5	–
Milwaukee, Wis.	86	56	1	1
Peoria, Ill.	37	21	1	2
Rockford, Ill.	28	16	4	–
South Bend, Ind.	35	24	1	–
Toledo, Ohio	86	64	4	5
Youngstown, Ohio	65	41	–	2
WEST NORTH CENTRAL:	698	437	20	17
Des Moines, Iowa	38	27	1	–
Duluth, Minn.	15	10	3	2
Kansas City, Kans.†	34	19	2	2
Kansas City, Mo.	110	77	1	1
Lincoln, Nebr.	16	11	2	1
Minneapolis, Minn.	76	55	2	–
Omaha, Nebr.	70	39	1	2
St. Louis, Mo.	231	135	6	3
St. Paul, Minn.	75	48	–	2
Wichita, Kans.	33	16	2	4
Las Vegas, Nev.*	10	3	2	–

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over		
SOUTH ATLANTIC:	921	497	46	30
Atlanta, Ga.	114	54	9	4
Baltimore, Md.	198	104	5	10
Charlotte, N. C.	23	12	1	–
Jacksonville, Fla.	90	58	4	3
Miami, Fla.	78	44	1	–
Norfolk, Va.	30	13	3	2
Richmond, Va.	57	23	1	1
Savannah, Ga.	31	13	5	3
St. Petersburg, Fla.	68	56	1	1
Tampa, Fla.	41	26	3	2
Washington, D. C.	140	60	9	2
Wilmington, Del.	51	34	4	2
EAST SOUTH CENTRAL:	395	193	21	22
Birmingham, Ala.	71	28	–	4
Chattanooga, Tenn.	22	11	–	–
Knoxville, Tenn.	18	13	1	–
Louisville, Ky.	96	48	14	9
Memphis, Tenn.	82	39	4	5
Mobile, Ala.	32	15	1	2
Montgomery, Ala.	20	7	–	–
Nashville, Tenn.	54	32	1	2
WEST SOUTH CENTRAL:	922	480	37	53
Austin, Tex.	24	14	5	3
Baton Rouge, La.	16	4	1	4
Corpus Christi, Tex.	13	4	1	5
Dallas, Tex.	165	82	4	10
El Paso, Tex.	10	4	–	4
Fort Worth, Tex.	66	37	2	4
Houston, Tex.	161	83	2	2
Little Rock, Ark.	35	17	3	4
New Orleans, La.	175	79	5	3
Oklahoma City, Okla.	57	35	2	4
San Antonio, Tex.	82	52	4	6
Shreveport, La.	54	31	5	3
Tulsa, Okla.	64	38	3	1
MOUNTAIN:	394	224	17	20
Albuquerque, N. Mex.	33	13	2	1
Colorado Springs, Colo.	27	20	2	–
Denver, Colo.	103	63	5	6
Ogden, Utah	24	9	2	4
Phoenix, Ariz.	103	59	1	5
Pueblo, Colo.	10	9	–	–
Salt Lake City, Utah	47	25	3	1
Tucson, Ariz.	47	26	2	3
PACIFIC:	1,562	1,005	29	46
Berkeley, Calif.	20	17	–	–
Fresno, Calif.	51	20	2	2
Glendale, Calif.	28	19	1	–
Honolulu, Hawaii	32	21	–	1
Long Beach, Calif.	90	63	3	–
Los Angeles, Calif.	455	309	4	9
Oakland, Calif.	77	51	1	7
Pasadena, Calif.	35	28	–	2
Portland, Oreg.	163	111	3	6
Sacramento, Calif.	85	56	2	3
San Diego, Calif.	107	58	1	3
San Francisco, Calif.	146	83	3	3
San Jose, Calif.	65	38	4	2
Seattle, Wash.	106	58	1	5
Spokane, Wash.	47	38	1	–
Tacoma, Wash.	55	35	3	3
Total	10,897	6,358	423	431
Expected Number	13,304	7,780	508	546
Cumulative Total (includes reported corrections for previous weeks)	672,078	384,568	29,703	31,908

*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

†Estimate – based on average per cent of divisional total

INFLUENZA – *(Continued from front page)*

Aveyron, Eure-et-Loire, and Haute-Savoie during the week of Dec. 12, 1969. *(4)* From here, activity spread to involve most of the country and, in particular, the Paris area and the Charentes, Brittany, Normandy, Tourraine, Burgundy, Champagne, Jura, and Languedoc. Of 110 paired sera, 35 percent showed evidence of A2 Hong Kong '68 and 3 percent showed parn-influenza virus type 1. All age groups appear to have been affected. *(1)*

In Italy, an epidemic of major proportions was reported with an estimated 15 to 20 million cases. Strains of A2 Hong Kong '68 were isolated. *(4)*

In Norway, an intense epidemic due to A2 Hong Kong '68 was reported from Tromso and Harstad, and an outbreak of influenza-like illness was reported in Oslo. *(4)* Denmark similarly noted an increase in influenza-like illness. *(1)*

In Israel, thousands of cases were reported in an outbreak which began during the second week in November. Twenty-four strains of Hong Kong-like virus were isolated.

In Austria, an epidemic of influenza-like illness was reported to be spreading rapidly through the southern Province of Kärnten. From southern Belgium, foci of influenza-like activity were occurring by December 19. *(1)*

In Spain, the epidemic which began about October 20 in Barcelona and its Province began to decline after reaching a peak between November 15 and 25. Overall mortality was 40 percent higher in November 1969 than in the same month of 1968.

Throughout the Federal Republic of Germany in the south more than the north, outbreaks of influenza-like illness were reported. Infection with the A2 Hong Kong '68 virus was confirmed.

In Switzerland, outbreaks of influenza-like illness occurred in Geneva, Bern, Basel, and Zurich, with isolates of A2 Hong Kong '68 confirmed in the last two cities.

From an outbreak in Czechoslovakia, strains of A2/Hong Kong '68 were isolated.

The outbreak of influenza which began in November in Croatia and Slovenia, Yugoslavia, spread to the rest of the country in December. More than 35,000 cases were reported in the first 2 weeks of December in Belgrade. Several strains of A2/Hong Kong '68 virus were isolated.

From an outbreak in Bucarest, Romania, a strain similar to B Mass/66 influenza virus was isolated.

Thus far this season in the United States, there have been only a few scattered isolates of A2 Hong Kong '68-like virus and no influenza B isolates. No outbreaks of upper respiratory illness in the United States except for Alaska (MMWR, Vol. 18, No. 50) have been attributable to the influenza virus.

References:

(1) World Health Organization Weekly Epidemiological Record 44(51):675, Dec. 19, 1969.

(2) The Registrar General's Provisional Weekly Influenza Statement 1969, 70 No. 2 for England and Wales, London, Dec. 19, 1969.

(3) New York Times, Dec. 30, 1969.

(4) World Health Organization Weekly Epidemiological Record 44(50):661, Dec. 12, 1969.

(Reported by the Respiratory Diseases Unit, Viral Diseases Branch, Epidemiology Program, NCDC.)

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 20,000 IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

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